K050441 (pg 10f2)



## 510(k) Summary

Applicant/Sponsor:

Biomet Manufacturing Corp.

56 East Bell Drive P.O. Box 587

Warsaw, Indiana 46581-0587

**Contact Person:** 

Kacy Arnold, RN, MBA

Regulatory Specialist

**Proprietary Name:** 

Taper 2<sup>™</sup> Porous Femoral Stem

**Common Name:** 

Femoral Hip Stem

**Classification Name:** The Taper 2<sup>™</sup> Porous Femoral Stems included in this submission have the following classification:

1. Hip joint metal/polymer/metal semi-constrained porous-coated uncemented prosthesis (21 CFR §888.3358), Product Code: LPH

2. Hip joint metal/polymer/metal semi-constrained porous-coated uncemented prosthesis (21 CFR §888.3358), Product Code: MBL

The mating components (modular heads and acetabular shells/liners) for use with the Taper  $2^{TM}$  Porous Femoral Stems have the following classifications:

- 1. Hip joint metal/polymer constrained cemented or uncemented prosthesis (21 CFR §888.3310), <u>Product Code</u>: KWZ
- 2. Hip joint metal/metal semi-constrained, with a cemented acetabular component, prosthesis (21 CFR §888.3320), <u>Product Code</u>: JDL
- 3. Hip joint metal/metal semi-constrained, with an uncemented acetabular component, prosthesis (21 CFR §888.3330), <u>Product Code</u>: KWA
- 4. Hip joint metal/polymer semi-constrained cemented prosthesis (21 CFR§ 888.3350), Product Code: JDI
- 5. Hip joint metal/ceramic/polymer semi-constrained cemented or nonporous uncemented prosthesis (21 CFR §888.3353), <u>Product Code</u>: LZO
- 6. Hip joint metal/ceramic/polymer semi-constrained cemented or nonporous uncemented prosthesis (21 CFR §888.3353), <u>Product Code</u>, MEH
- 7. Hip joint metal/polymer/metal semi-constrained, porous-coated, uncemented prosthesis (21 C.F.R. §888.3358), <u>Product Code</u>: LPH
- 8. Hip joint metal/polymer/metal semi-constrained, porous-coated, uncemented prosthesis (21 C.F.R. §888.3358), <u>Product Code</u>: MBL
- 9. Hip joint (hemi-hip) acetabular metal cemented prosthesis, (21 CFR §888.3370), Product Code: KWB

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10. Hip joint (hemi-hip) acetabular metal cemented prosthesis

(21 CFR §888.3370), Product Code: LZY

11. Hip joint femoral (hemi-hip) metal/polymer cemented or uncemented prosthesis

(21 CFR§888.3390), Product Code: KWY

## Legally Marketed Devices To Which Substantial Equivalence Is Claimed:

TaperLoc® Porous and Reduced Distal Femoral Stems – Biomet (K921301) Mayo® Conservative Hip Prosthesis – Zimmer Inc. (K943230)

**Device Description:** The Taper 2<sup>™</sup> Porous Femoral Stem is a short, tapered stem, designed to provide rotational stability for long-term fixation and physiologic proximal load transfer for bone preservation.

Indications for Use: Taper 2<sup>™</sup> Porous Femoral Stems

1. Non-inflammatory degenerative joint disease including osteoarthritis and avascular necrosis.

Rheumatoid arthritis

3. Correction of functional deformity

- Treatment of non-union, femoral neck fracture, and trochanteric fractures of the proximal femur with head involvement, unmanageable using other techniques.
- 5. Revision of previously failed femoral head resurfacing component.

The Taper  $2^{\text{TM}}$  Porous Femoral Stems are intended for non-cemented use only.

**Summary of Technologies:** The Taper 2<sup>™</sup> Porous Femoral Stems are made of the same materials and utilize the same manufacturing, packaging and sterilization processes as the predicate devices. Testing determined that the stems are substantially equivalent to the predicate stems.

**Non-Clinical Testing:** Reference literature and performance data demonstrate that the Taper 2<sup>™</sup> Porous Femoral Stems are substantially equivalent to the predicate femoral hip stems.





JUN 2 9 2005

Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

Ms. Tracy Bickel Johnson, RAC Manager of Regulatory Affairs Biomet Manufacturing Corporation P.O. Box 587 Warsaw, Indiana 46581-0587

Re: K050441

Trade/Device Name: Taper 2<sup>TM</sup> Porous Femoral Stem

Regulation Number: 21 CFR 888.3358, 888.3310, 888.3320, 888.3330, 888.3350,

888.3353, 888.3370, 888.3390

Regulation Name: Hip joint metal/polymer/metal semi-constrained porous-coated,

uncemented prosthesis; Hip joint metal/polymer constrained cemented or uncemented prosthesis; Hip joint metal/metal semi constrained, with a cemented acetabular component, prosthesis; Hip joint metal/metal semi-constrained, with an uncemented acetabular component; Hip joint metal/ polymer semi-constrained cemented prosthesis; Hip joint metal/ceramic/polymer semi-constrained cemented or nonporous uncemented prosthesis; Hip joint (hemi-hip) acetabular metal cemented prosthesis; Hip joint femoral (hemi-hip) metal/polymer

cemented or uncemented prosthesis.

Regulatory Class: III

Product Code: LPH, MBL, KWZ, JDL, KWA, JDI, LZO, MEH, KWB, LZY, KWY

Dated: May 26, 2005 Received: May 27, 2005

## Dear Ms. Johnson:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050. This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0210. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <a href="http://www.fda.gov/cdrh/industry/support/index.html">http://www.fda.gov/cdrh/industry/support/index.html</a>.

Sincerely yours,

Miriam C. Provost, Ph.D.

Acting Director

Division of General, Restorative and Neurological Devices Office of Device Evaluation Center for Devices and

Radiological Health

## **Indications for Use**

510(k) Number (if known):	K05044
Device Name:	Taper 2™ Porous Femoral Stem
Indications For Use:	
The Taper 2 <sup>™</sup> Porous Femoral Sthe following:  Non-inflammatory of Rheumatoid arthritic. Correction of function Treatment of non-unwith head involvem. Revision of previous  Taper 2 <sup>™</sup> Porous Femoral Stem  Specific indications for compation.  Constrained Liners (K030047)	anal deformity nion, femoral neck fracture, and trochanteric fractures of the proximal femurent, unmanageable by other techniques siy failed femoral head resurfacing component as are intended for uncemented use only. The components that can be used with the above femoral stems include:
revision surgery at high risk of [tissue] laxity, neuromuscular on constrained acetabular compor	hip dislocation due to history of phor dislocation, joint of both see, per lisease, or intra-operative instability and for whom all other options to
Calvara (Openlogy Hip and Tot	al Femur components are also indicated for cases of ligament deficiency, evision of unsuccessful osteotomy or arthrodesis.
Interlocking Stems (K990830,	
Interlocking hip stems are indicated oncology or other situations we of a standard type hip replace	cated for non-cemented application in cases of revision, trauma, fracture, here severe proximal bone loss may compromise the fixation and stability ment prosthesis.
Prescription Use X (Part 21 CFR 801 Subpart D)	AND/OR Over-The-Counter Use (21 CFR 807 Subpart C)
(PLEASE DO NOT WF	ITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)
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and Neurological Devices